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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,943	01/26/2004	Bradley J. Gill	STL11363	9297
7590 08/22/2005 Seagate Technology LLC 1280 Disc Drive Shakopee, MN 55379			EXAMINER FIGUEROA, NATALIA	
			ART UNIT 2651	PAPER NUMBER

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,943

Applicant(s)

GILL ET AL.

Examiner

Natalia Figueroa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 8, 9, 11, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 2-7 and 12-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>01/26/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 26 January 2004 (01/26/2004) is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 3, numerical element 315 is not in the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Ohzeki et al (USPN 6,084,733), hereinafter Ohzeki.

RE claim 10, Ohzeki discloses a data storage device comprising one or more read/write heads (fig. 1, and col. 3, lines 37-42); a storage medium accessible by the one or more read/write heads (fig. 1, and col. 37-38); a processor coupled with the read/write heads to access data on the storage medium (fig. 1, and col. 3, lines 14-15); and a memory connected with and readable by the processor and having stored therein one or more host programmable tests overwritten onto vendor specific portions of a self- monitoring program and executable by the data storage device while the data storage device is connected with a host (abstract, fig. 2, and col. 2, lines 3-16 and col. 3, lines 54-65).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzeki in view of Rothberg (USPN 6,895,500).

RE claim 1, Ohzeki discloses a method of executing one or more self-tests on a data storage device comprising selecting one or more host programmable tests stored in memory in the data storage device by setting data in a first log in memory of the data storage device (abstract, fig. 2, and col. 2, lines 3-16) executing the one or more host programmable tests on the data storage device (col. 3, lines 54-65). Ohzeki fails to explicitly teach setting parameters for execution of the one or more host programmable tests by setting one or more values in a second log in memory of the data storage device; and storing results of the one or more host programmable tests in a third log in memory of the data storage device. However, Rothberg discloses such on (fig. 1, and col. 4, lines 8-20) and (col. 4, lines 5-63).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to improve the apparatus as disclosed by Ohzeki with the above teachings from Rothberg to provide a self monitoring analysis of a disk drive, hence being able to evaluate the health of a disk drive, therefore avoiding impending failures or loss of data.

RE claim 11, Ohzeki is relied upon for the same reasons of rejection as stated above. Ohzeki fails to explicitly teach that the self-monitoring program is the Self-Monitoring, Analysis, and Reporting Technology (SMART) program. However, Rothberg discloses such on (abstract, and col. 3, line 63-col. 4, line 7).

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8. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzeki, and Rothberg in view of Lenny et al (USPN 6,600,614, hereinafter Lenny).

RE claim 8, the combination of Ohzeki, and Rothberg is relied upon for the same reasons of rejection as stated above. Ohzeki, and Rothberg fail to explicitly teach that executing the one or more host programmable tests on the data storage device comprises executing the one or more host programmable tests in a captive mode.

However, Lenny discloses such on (col. 9, lines 28-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to improve the apparatus as disclosed by Ohzeki and Rothberg with the above teachings from Lenny to provide a self monitoring analysis of a disk drive, hence being able to evaluate the health of a disk drive, therefore avoiding impending failures or loss of data.

RE claim 9, the combination of Ohzeki, and Rothberg is relied upon for the same reasons of rejection as stated above. Ohzeki, and Rothberg fail to explicitly teach that executing the one or more host programmable tests on the data storage device comprises executing the one or more host programmable tests in an offline mode. However, Lenny discloses such on (col. 9, lines 30-33).

9. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzeki in view of Lenny.

RE claim 18, Ohzeki is relied upon for the same reasons of rejection as stated above. Ohzeki fails to explicitly teach that the one or more host programmable tests are executable in a captive mode.

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However, Lenny discloses such on (col. 9, lines 28-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to improve the apparatus as disclosed by Ohzeki with the above teachings from Lenny to provide a self monitoring analysis of a disk drive, hence being able to evaluate the health of a disk drive, therefore avoiding impending failures or loss of data.

RE claim 19, Ohzeki is relied upon for the same reasons of rejection as stated above. Ohzeki fails to explicitly teach that the one or more host programmable tests are executable in an offline mode. However, Lenny discloses such on (col. 9, lines 30-33).

Allowable Subject Matter

10. Claims 2-7 and 12-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following documents are cited to further show the state of the art with respect to self-testing of a drive.

Lenny et al (USPN 6,650,492): Discloses self-contained test for integrity of disk.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Figueroa whose telephone number is (571) 272-7554.

The examiner can normally be reached on Monday - Thursday 8:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


NFM


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